



**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Promoting More Efficient Use of Spectrum)	ET Docket No. 10-237
Through Dynamic Spectrum Use Technologies)	

**COMMENTS OF THE
TM FORUM**

The TM Forum is pleased to provide comments to the FCC regarding the Notice of Inquiry (NOI) released under ET Docket No. 10-237. The TM Forum, www.tmforum.org, is a not-for-profit industry association with more than 750 corporate members in 195 countries focused on enabling best-in-class Information and Communications Technology for service providers in the communications, media and cloud service markets. The Forum provides business-critical industry standards and expertise to enable the creation, delivery and monetization of digital services.

With support from our Government and Defense Community members, TM Forum has established an initiative to address the need for increased integration of spectrum management with network management. The scope of this initiative is captured in a draft Spectrum Management Prospectus, which points to the increasingly dynamic nature of wireless network operations and regulatory trends towards dynamic spectrum assignment as examples of drivers for spectrum related enhancements to existing TM Forum standards. At our Management World Americas conference in 2010, one of the sessions focused on spectrum management, with presentations on topics including DoD perspectives on Spectrum Management Standardization for Dynamic Spectrum Access (DSA), the need for Integration of Spectrum Management and Network Management, and IEEE standards for dynamic spectrum access. Feedback from our TM Forum membership has confirmed that this topic is of interest to commercial service providers, vendors and integrators as well as the Government and Defense communities.

The FCC NOI addresses, in part, the development of increasingly dynamic, automated means for granting access to spectrum to enable new services. Parallel trends are apparent around the world, as regulators establish mechanisms for automating access to television (TV) broadcast channels in areas where no currently licensed broadcasters are operating. As envisioned by regulators in both the US and Europe, service providers' operations support systems (OSS) will be required to regularly interact with a TV band database established by the regulator. The use of open standards for these types of automated interactions would be of significant benefit to not only the regulator, database operator and network operator, but also to the vendors developing global solutions for TV band devices and associated management systems. As the world's leading industry association for integrated business architecture



standards, the TM Forum is in the best position to lead the development of standardized data models, business process models, and integration architectures for dynamic, automated spectrum access solutions.

The TM Forum offers mature standards for OSS integration and provides an excellent forum in which to enhance existing standards to support these new dynamic spectrum capabilities. The TM Forum Information Framework, Business Process Framework, Applications Framework, and Integration Architecture Framework provide a solid foundation on which to build increasingly dynamic spectrum access solutions. The TM Forum is committed to moving forward with the Spectrum Management Initiative, to begin the standards development process. Due to the unique nature of automation between the service provider and the spectrum regulator, the TM Forum is actively soliciting and encouraging the participation of spectrum regulators worldwide. In response to paragraph 55 in the NOI, the FCC is encouraged to look to existing standards to the greatest extent possible as it develops rules and mechanisms for dynamic spectrum access. FCC's active involvement in standardization efforts, such as the TM Forum Spectrum Management Initiative, would be a significant value in promoting a robust marketplace for global standards-based solutions.

Dynamic TV band access mechanisms are expected to be the first of a series of increasingly dynamic approaches to managing spectrum. The NOI also refers to policy-based radios, for which standards are already being developed by the IEEE. As policy-based radios move into the marketplace, solutions will be needed to manage policy-based spectrum access. The TM Forum Policy-Based Management Initiative was established to develop and promote standards for all aspects of policy-based management. This initiative recently completed and demonstrated an automated interface for policy exchange between systems, a key capability for end-end policy management. The policy exchange interface is another example of how the TM Forum is leading efforts to standardize policy-based radio operations in the future.

The TM Forum encourages the FCC to consider active participation in our Spectrum Management and Policy-Based Management initiatives to ensure the broadest acceptance of the resulting standards products. We believe that through FCC participation in our R&D experimentation, TM Forum Events, and other member driven, collaboration-based activities standards-based solutions can be enriched to further reduce the cost of integration for new services and solutions emerging from dynamic spectrum access.